

CLAIMS

1. A painting booth comprising:

- a frame, which supports a plurality of movable walls made of deformable material, the internal surfaces of said movable walls bounding a volume, which can contain objects to be painted, at least one distributor being arranged inside said volume and being suitable to distribute painting powders meant to be applied to the surface of said objects to be painted; and

- removal means, which are suitable to interact operatively with said movable walls, so as to facilitate the removal of residual painting powders which deposit on their internal surfaces of said movable walls; and

- actuation means which are suitable to move said movable walls with respect to said removal means;

characterized in that said actuation means comprise coupling means for coupling to said movable walls, said coupling means being suitable to move the movable walls so as to keep said internal surfaces constantly taut.

2. The painting booth, according to claim 1, characterized in that said coupling means comprise, for at least one of said movable walls, a first roller and a second roller, which are arranged so that their axes are substantially parallel to each other and are perpendicular to the vertical extension of the cabin, at least one ribbon-like belt being arranged on said rollers, said movable wall being operatively connected to said belt.

3. The painting booth according to claim 2, characterized in that said movable wall is made of a sheet of deformable material, said sheets having a first end and a second end which are rigidly coupled to the corresponding ribbon-like belt.

4. The painting booth according to claim 2, characterized in that said movable wall is provided as substantially flat sheet which has a first end which is rigidly coupled to the corresponding ribbon-like belt and a second end to

which at least one counterweight is connected.

- 5 5. The painting booth according to one or more of claims 2 to 4, characterized in that said coupling means comprise two ribbon-like belts, which are arranged on said rollers and are mutually spaced along the extension of the axes of the rollers.
6. The painting booth according to one or more of the preceding claims, characterized in that said removal means comprise at least one brush, which is operatively associated with a corresponding movable wall and is suitable to brush the internal surface of said movable wall.
- 10 7. The painting booth according to one or more of claims 1 to 5, characterized in that said removal means comprise at least one suction device, which is associated with a corresponding movable wall and has a suction section which is suitable to aspirate the painting powder deposited on the internal surface of said wall.
- 15 8. The painting booth according to one or more of claims 1 to 5, characterized in that said removal means comprise at least one blade, which is operatively associated with a corresponding movable wall and is suitable to scrape its internal surface.
- 20 9. The painting booth, according to one or more of claims 1 to 5, characterized in that said removal means comprise at least one brush and at least one suction device, which has a suction section, said brush and said suction device being operatively associated with a corresponding movable wall and being respectively suitable to brush the internal surface of said wall and to aspirate therefrom the painting powder deposited thereon.
- 25 10. The painting booth according to one or more of claims 1 to 5, characterized in that said removal means comprise at least one blade and at least one suction device which has a suction section, said blade and said suction device being operatively associated with a corresponding movable wall and being

respectively suitable to skim the internal surface of said wall and to aspirate therefrom the painting powder deposited thereon.

11. The painting booth according to claims 6 and 7, characterized in that said brush and/or said suction device are arranged at said first roller, said brush
5 and/or the suction section of the suction device being arranged substantially along the entire depth of the movable wall with which they are associated.

12. The painting booth according to claims 7 and 8, characterized in that said blade and/or said suction device are arranged at said first roller, said blade
10 and/or the suction section of the suction device being arranged substantially along the entire depth of the movable wall with which they are associated.

13. The painting booth according to one or more of claims 2 to 12, characterized in that said actuation means comprise at least one motor, which is operatively associated with one of said rollers.

14. The painting booth according to claim 13, characterized in that said
15 actuation means comprise a motor for one or more of said movable walls.

15. The painting booth according to claim 13, characterized in that said actuation means comprise a single motor, which is operatively associated with two or more of said movable walls.